



No.:
FCCSZ2025-0077-H

TEST REPORT

FCC ID : 2A3HVP1601

NAME OF SAMPLE : Hydrow Touchscreen Monitor

APPLICANT : Hydrow, Inc

CLASSIFICATION OF TEST : N/A

CVC Testing Technology (Shenzhen) Co., Ltd.



Applicant	Hydrow, Inc
Address	10 Summer St, Floor 5, Boston, MA, USA

Manufacturer	Hydrow, Inc	
Address	10 Summer St, Floor 5, Boston, MA, USA	
Product Name	Hydrow Touchscreen Monitor	
Brand Name	N/A	
Model Name	P1601	
Additional Model	N/A	
Date of Receipt.	Jul.30, 2025	
Date of testing	Jul.30, 2025 ~ Aug.30, 2025	
Sample No.	N/A	
Standard(s)	FCC Part 2 (Section 2.1091) KDB 447498 D04 v01	
CONCLUSION:	The equipment under test was found to comply with the requirements of the standard(s) applied.	
	Seal of CVC Issue Date: Aug.30, 2025	
Compiled by: Liang Jiatong	Reviewed by: Mo Xianbiao	Approved by: Dong Sanbi
Signature:	Signature:	Signature:

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TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1. GENERAL PRODUCT INFORMATION	5
2. RF EXPOSURE LIMIT	6
3. CLASSIFICATION	8
4. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER	8
5. MAXIMUM PERMISSIBLE EXPOSURE	8



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCCSZ2025-0077-H	Original release	Jun. 25,2025



1. GENERAL PRODUCT INFORMATION

PRODUCT NAME	Hydrow Touchscreen Monitor		
BRAND NAME	N/A		
MODEL NAME	P1601		
POWER SUPPLY	DC 15V 2A From Adapter		
MODULATION TYPE	BT	GFSK for DTS GFSK, $\pi/4$ DQPSK, 8DPSK for DTS	
	WiFi	CCK, DQPSK, DBPSK for DSSS 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM	
	ANT+	GFSK for DTS	
OPERATING FREQUENCY	BT	2402MHz ~ 2480MHz	
	WiFi	2412MHz ~ 2462MHz, 5180MHz ~ 5240MHz, 5745MHz ~ 5825MHz	
	ANT+	2457MHz	
PEAK OUTPUT POWER		13.07dBm or 2402MHz ~ 2480MHz,	
		17.27dBm for 2412MHz ~ 2462MHz,	
		15.10dbm for 5180MHz ~ 5240MHz	
		16.98dbm for 5745MHz ~ 5825MHz	
		-9.96dbm for 2457MHz(See section4)	
ANTENNA TYPE (Remark 5)		BT:FPC Antenna, with 2.90dBi gain	
		WiFi 2.4G:FPC Antenna, with 2.90dBi gain	
		WiFi 5G:FPC Antenna, with 3.40dBi gain	
		ANT+:PCB Antenna, with 0.5dBi gain	
I/O PORTS	Refer to User's Manual		
CABLE SUPPLIED	N/A		
<p>Remark:</p> <ol style="list-style-type: none">1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.3. EUT photo refer to the report (Report NO.: FCCSZ2025-0077-EUT).4. Please refer to the antenna report.5. Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, CVC is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.			



2. RF EXPOSURE LIMIT

(Option B) According to FCC Part2.1091 and FCC Part1.1307b, the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where:

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz;

and

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

(Option C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to §1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source Frequency (MHz)	Threshold ERP (W)
0.3 - 1.34	$1920R^2$
1.34 - 30	$3450R^2/f^2$
30 - 300	$3.38R^2$
300 - 1500	$0.0128R^2/f^2$
1500 - 100000	$19.2R^2$



For multiple RF sources: Multiple RF sources are exempt if:

- a) The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required). This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(i)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(i)(A).
- b) in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure\ Limit_k} \leq 1$$

Where:

a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of this section for P_{th} , including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.

P_i = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

$P_{th,i}$ = the exemption threshold power (P_{th}) according to paragraph (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i .

ERP_j = the ERP of fixed, mobile, or portable RF source j .

$ERP_{th,j}$ = exemption threshold ERP for fixed, mobile, or portable RF source j , at a distance of at least $\lambda/2\pi$ according to the applicable formula of paragraph (b)(3)(i)(C) of this section.

$Evaluated_k$ = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

$Exposure\ Limit_k$ = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k , as applicable from § 1.1310 of this chapter.



3. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

4. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The measured Conducted Power

Option	Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
B	BT	2402 ~ 2480	14	+1	13	15
	2.4G WiFi	2412 ~ 2462	18	+1	17	19
	5.1G WiFi	5180 ~5240	16	+1	15	17
	5.8G WiFi	5745 ~5825	17	+1	16	18

The measured Field strength of fundamental

Option	Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
B	ANT+	2457	-9	+1	-10	-8
Maximum Peak Power (dBm/MHz) = Maximum Peak Power (dBuV/MHz) - 95.2						
ANT+:Power (dBm/MHz) = Maximum Peak Power (dBuV/MHz) - 95.2=85.24-95.2= -9.96dbm						

5. MAXIMUM PERMISSIBLE EXPOSURE

Mode	Frequency (MHz)	Maximum tune up power(dBm)	Maximum Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Part1.1307b Threshold (mW)	Ratio
BT	2402 ~ 2480	15	2.90	17.90	15.75	37.58	3060	0.012
2.4G WiFi	2412 ~ 2462	19	2.90	21.90	19.75	94.40	3060	0.030
5.1G WiFi	5180 ~5240	17	3.40	20.40	18.25	66.83	3060	0.021
5.8G WiFi	5745 ~5825	18	3.40	21.40	19.25	84.14	3060	0.027
ANT+	2457	/	/	-8	-10.15	0.1	3060	0.00003

ERP(dBm)=EIRP(dBm)-2.15

CONCLUSION:

This EUT can operate simultaneously in BT and WiFi;ANT+

Max: BT + WiFi +ANT+: 0.012 + 0.030+0.00003= 0.03203< 1, which is less than the "1" limit. So is compliant with the RF exposure requirements.

----- End of the Report -----



Important

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Lab Address: No. 1301-14, Guanguang Road, Xinlan Community, Guanlan Subdistrict, Longhua District, Shenzhen, Guangdong, China

Post Code: 518110 Tel: 0755-23763060-8805

Fax: 0755-23763060 E-mail: sz-kf@cvc.org.cn